



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,856	09/29/2003	Ian Millard	12406-166003 / P2003,0240	3711
26181	7590	05/25/2006	EXAMINER	
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			HEINRICH, SAMUEL M	
			ART UNIT	PAPER NUMBER
			1725	
DATE MAILED: 05/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,856

Applicant(s)

MILLARD ET AL.

Examiner

Samuel M. Heinrich

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 and 21-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 7-9 and 21-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03222006.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly submitted claims do not have support in the original disclosure. For example, Claim 27 describes a channel that is "not parallel to a direction of travel of the laser beam." This description does not appear in the specification and appears too broad for the description which can be understood from the drawings. Again for example, Claim 28 describes "forming an aperture" and "covering the aperture with a transparent material." This broad description was not originally disclosed. The scope of the newly submitted claim provides putting transparent material as a cover on a window having one aperture used for ablation, however, this embodiment was never disclosed in the original description. All of the newly submitted claims must be described with respect to where details of the new claims have support in the original disclosure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 describes "one aperture of a plurality of apertures in said window" however the independent Claim 7 only describes one aperture. The description is not clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-9, 21-27, 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,368,560 to Rambo et al and in view of US20020040894A1 to Borstel and in view of JP02002283090A and in view of JP362095818A. AAPA describes (Description of the

Related Art and IDS submission) the wide range of well known laser systems and methods of use. Rambo et al disclose (column 2, lines 50-56) well known "foreign debris and/or the patient's tissue" which can be block a laser apparatus nozzle. Borstel and JP02002283090A show examples of laser machines comprising barrier windows which have an aperture therein. Borstel describe [0012] flushing gas directed towards or away from the workpiece. JP362095818A describes how "reaction gas 8 can hardly reach the window 4 due to the narrowed aperture". The use of a barrier window having an aperture therein at a top end of a nozzle would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the protective windows are well known in many positions and the lens position at a top of a nozzle provides protection to the apparatus from bea, reaction debris. Aperture size both greater and less than the beam size are disclosed; e.g., JP02002283090A shows an aperture larger than the beam and Borstel shows an aperture smaller than the beam. A transparent window is disclosed in AAPA (Specification, page 2). The function of the barrier does not require transparency and the use of an opaque barrier, such as an optical diaphragm disclosed by Borstel, would have been obvious at the time applicant's invention was made to a person having ordinary skill for use in beam shaping. Gas supply or exit apertures in the nozzle which are not parallel to the beam are shown in Borstel (Fig. 3). The prior art describe many workpieces and the formation of an LED would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the use of gas flow provides cleaner work products. The ultraviolet laser is well known in the prior art.

Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,368,560 to Rambo et al and in view of US20020040894A1 to Borstel and in view of JP02002283090A and in view of JP362095818A as applied to claim 21 above, and further in view of USPN 5,242,055 to Pora. Pora describes well known covering of apertures with transparent material and the use thereof in any article which requires cleanliness until the time of use would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides both cleanliness and ability for inspection.

Claims 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,368,560 to Rambo et al and in view of US20020040894A1 to Borstel and in view of JP02002283090A and in view of JP362095818A as applied to claim 7 above, and further in view of JP02000351089A. JP02000351089A discloses a protective window assembly having at least one hole and desireably a plurality of holes. The use of a plurality of holes would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because hole provide adjustment of pressure.

Claims 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 5,368,560 to Rambo et al and in view of US20020040894A1 to Borstel and in view of JP02002283090A and in view of JP362095818A as applied to claim 30 above, and further in view of JP02000225487A. Plural assist gas passages are shown in JP02000225487A (Figures 1-4) and the use thereof with a laser which produces a debris plume would have been

Art Unit: 1725

obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides smoothened gas flow.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art pertains to laser processes.

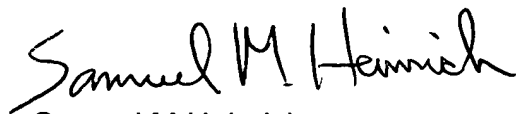
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Samuel M Heinrich
Primary Examiner
Art Unit 1725

SMH